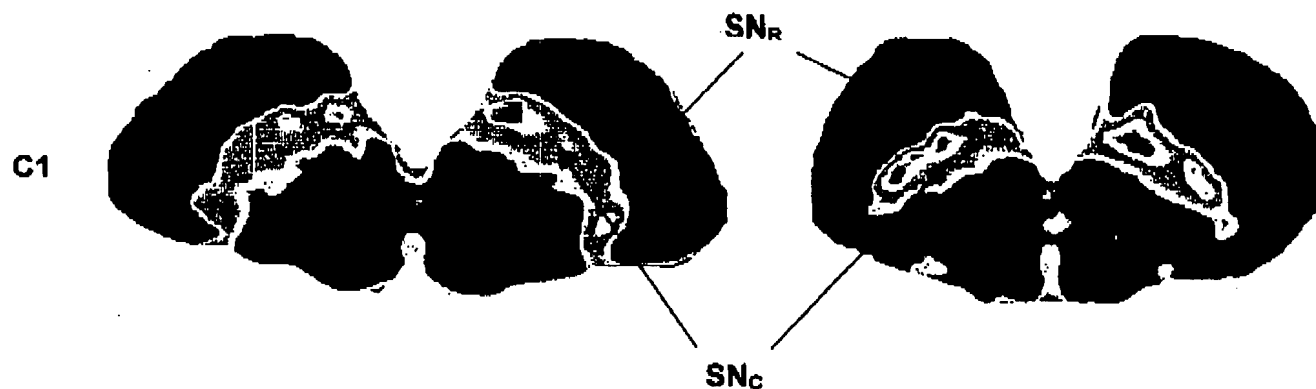


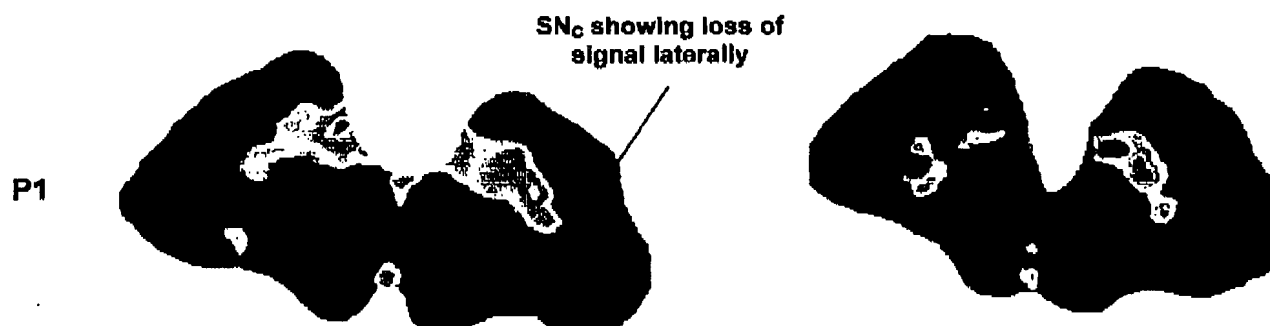
Upper Slice Nationals

Layer Slice Normals



Upper Slice Early Stage PD

Lower Slice Early Stage PD



Upper Slice Late Stage PD

Lower Slice Late Stage PD

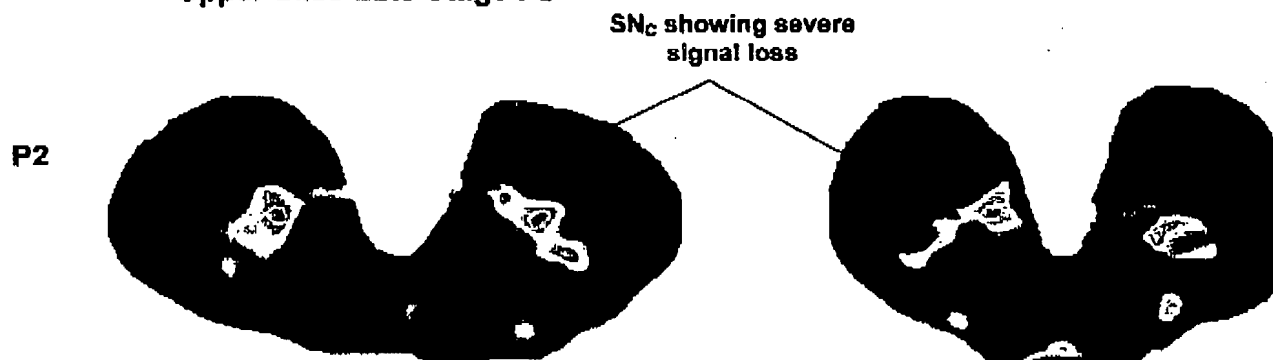
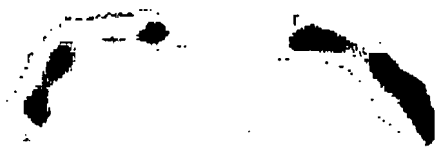


FIG. 1

**SN_c Upper Slice
Control subject**



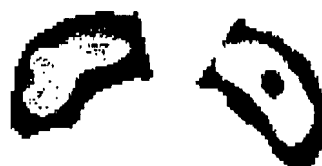
**SN_c Lower Slice
Control subject**



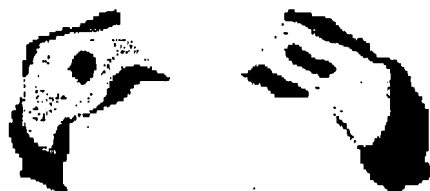
**SN_c Upper Slice
PD Patient 1**



**SN_c Lower Slice
PD Patient 1**



**SN_c Upper Slice
PD Patient 2**

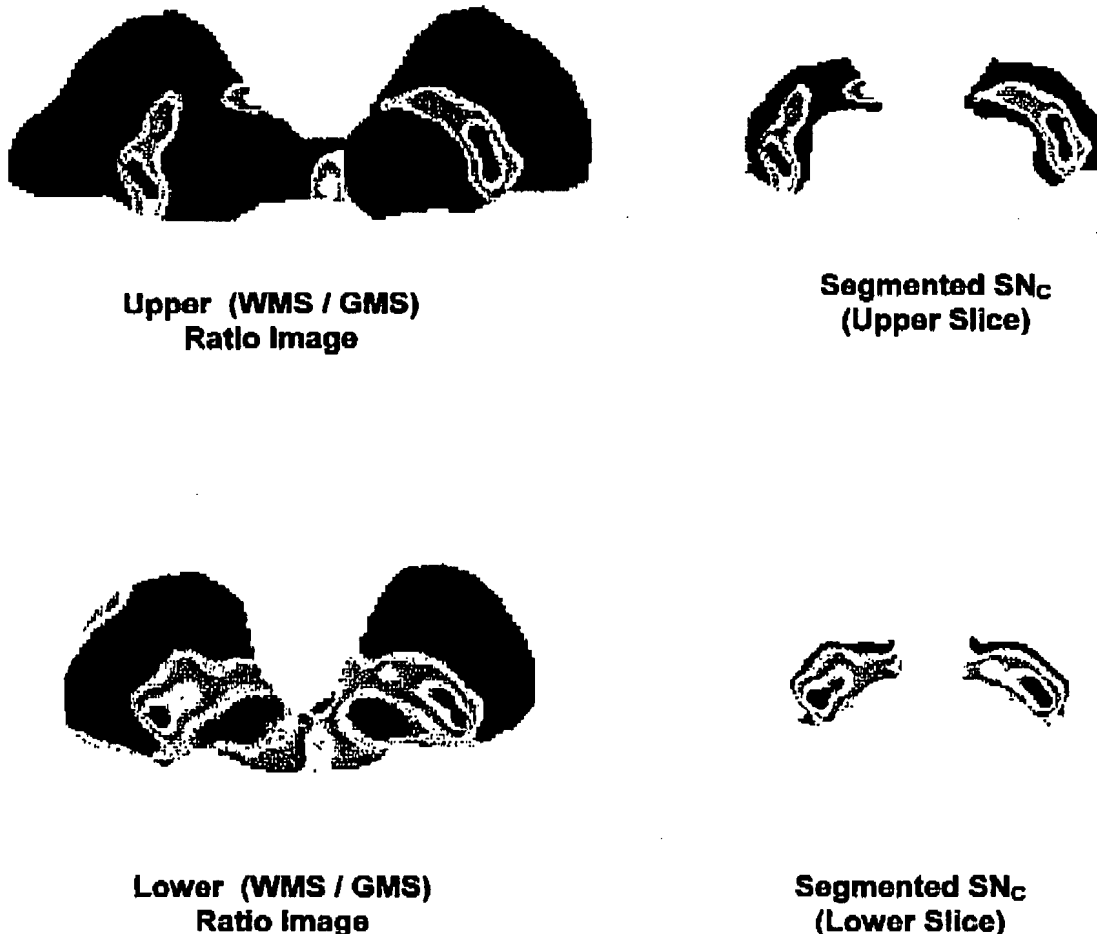


**SN_c Lower Slice
PD Patient 2**



Ratio images of the substantia nigra pars compacta (SN_c) after automated segmentation of the WMS images of the cerebral peduncle.

Progressive Supranuclear Palsy (PSP)



Imaging of the substantia nigra pars compacta (SN_c) in Progressive Supranuclear Palsy (PSP). The left column shows the (WMS / GMS) ratio images of upper and lower slices and the right hand side displays the SN_c segmented from the WMS images of the cerebral peduncle. Images are displayed using the pseudo color lookup table on the right. Note that the gradient of signal is in the opposite direction to that seen in Parkinson's disease (i.e. there is relative loss of signal medially). This suggests the possibility of distinguishing the two forms of parkinsonism radiographically.

FIG. 3

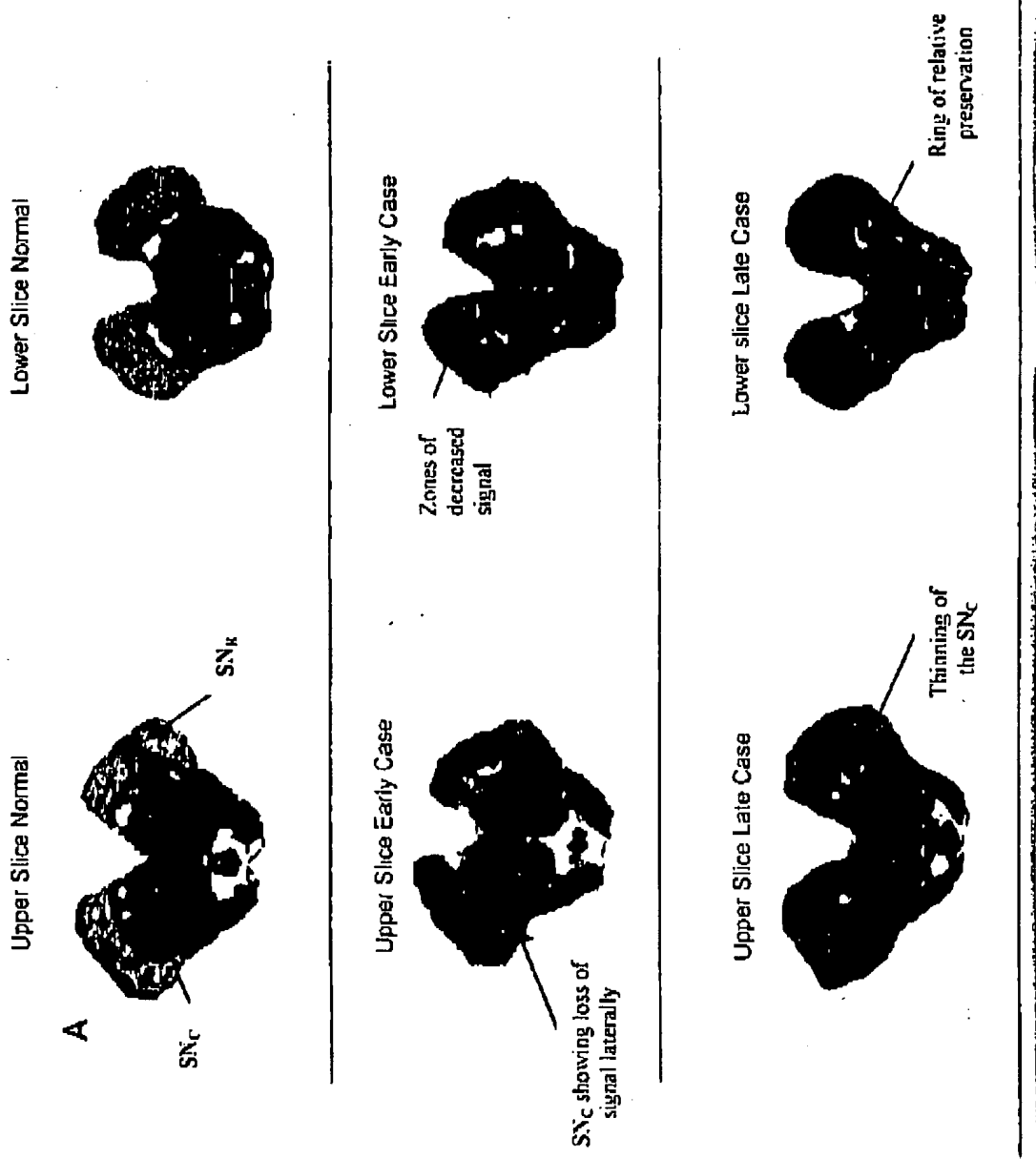


Fig. 4

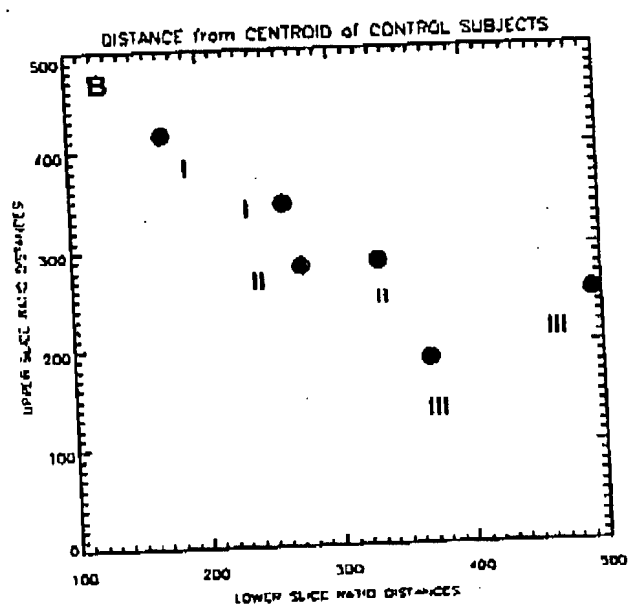


Fig. 5

AJNR: 21, April 2000

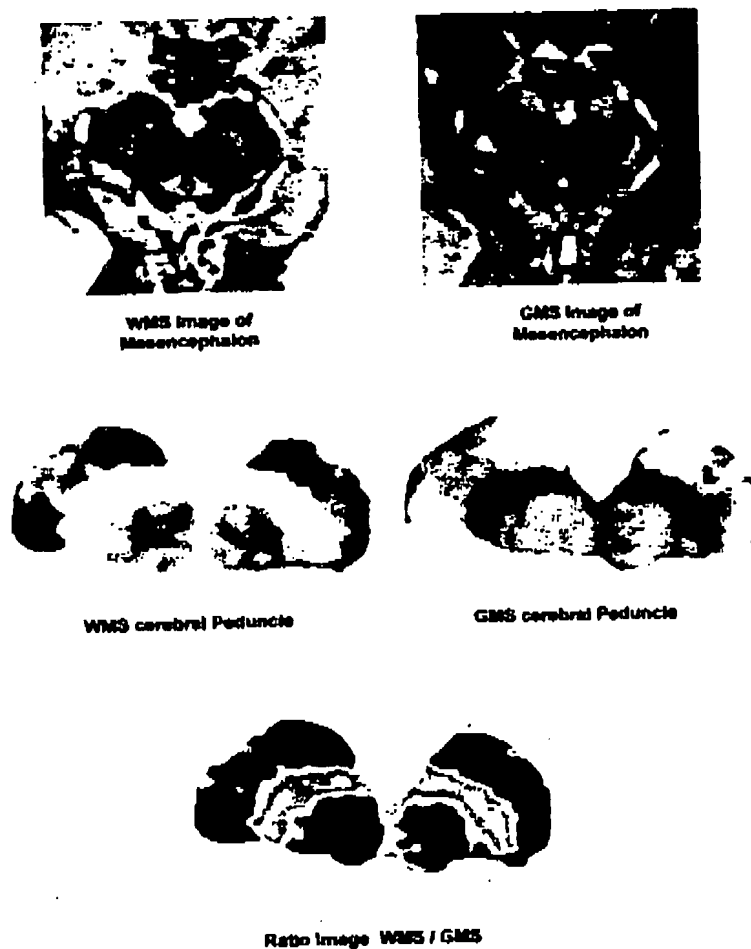


Fig. 6

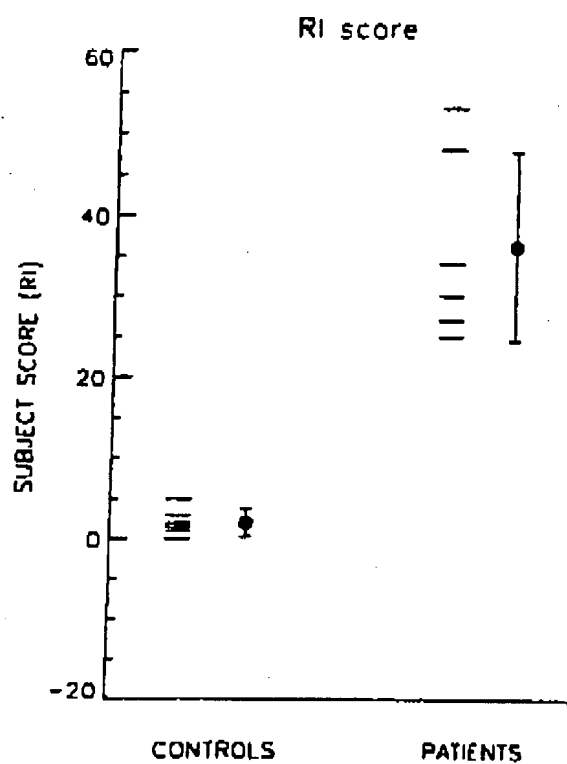


Fig. 7

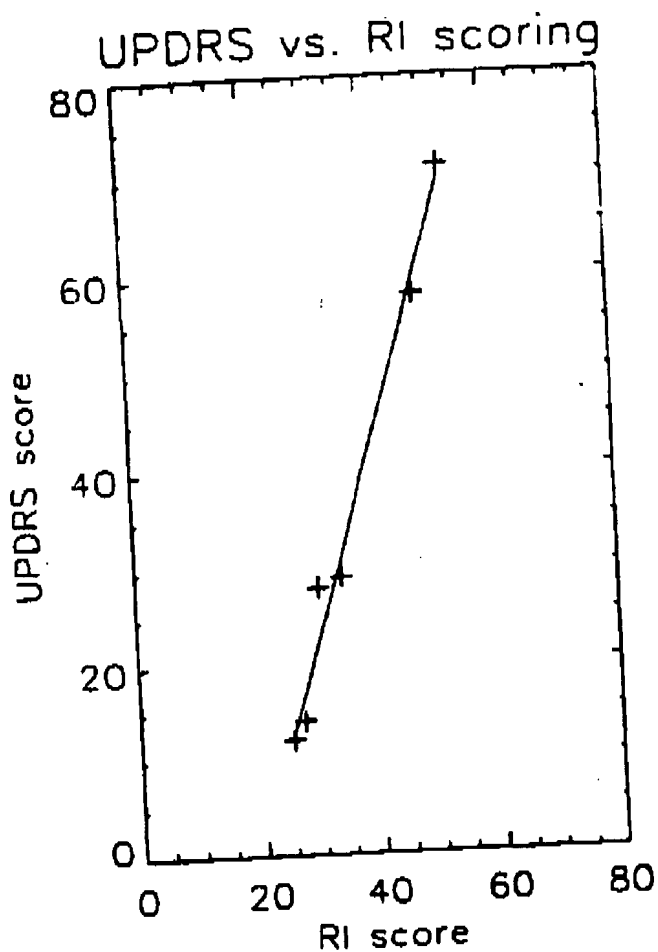


Fig. 8